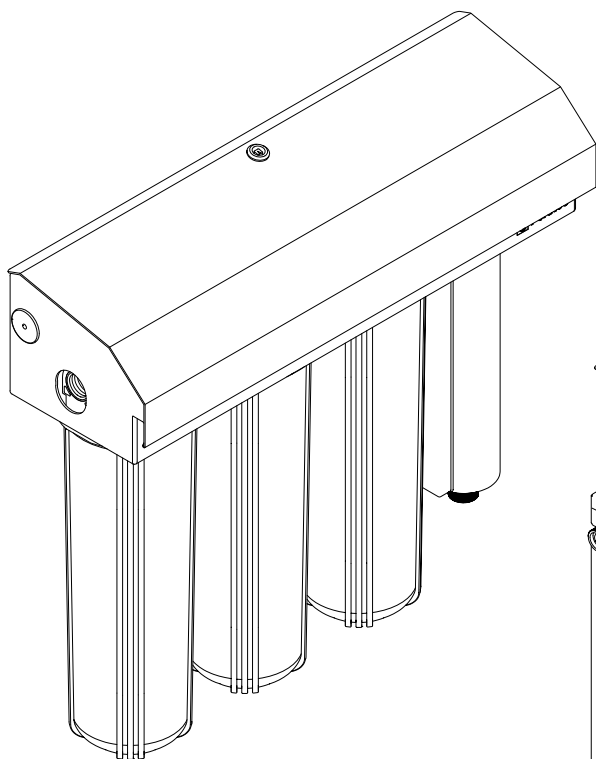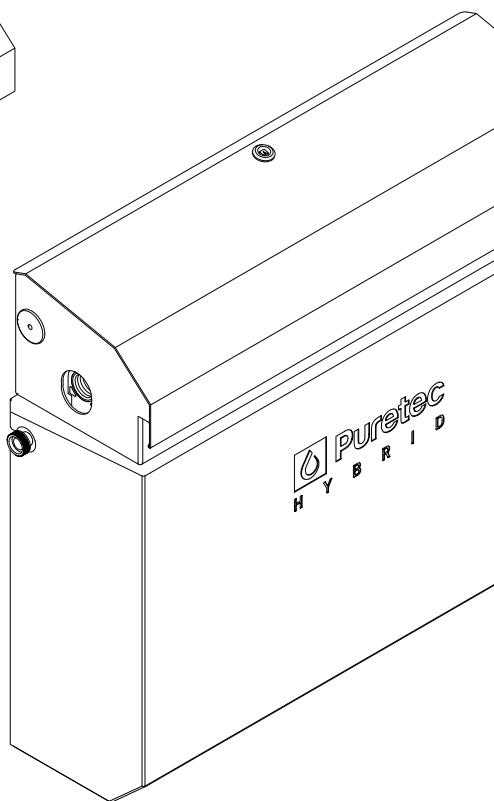# *Hybrid E*

Hybrid E Reversible High Flow UV Water Treatment System
Installation Guide

Registered Design & Patent Pending

Puretec®
PERFECTING WATER

R A I N W A T E R

What's Inside

WaterMark
AS 3497
Licence No. WM 74617
Pro-Switch Pty Ltd

LISTED 785C

⚠ CAUTION

SURGE PROTECTION REQUIRED / NO EXTENSION CORDS.

Puretec Customer Service

Thank you for purchasing a Puretec Hybrid E Series System. Your system is a proven performer manufactured from quality materials and components and will give years of 'spring like' water, if maintained and installed properly.

Puretec Hybrid ultraviolet systems are designed for common rainwater. The effectiveness of a ultraviolet steriliser is dependent on the clarity of water present. If you are unsure of the clarity of your water Puretec can arrange a ultraviolet transmittance (UVT) test to verify that no further filtration is required before the Hybrid E System. Contact Puretec on 1300 140 140 (AU) or 0800 130 140 (NZ) for further information on this.

Introduction

Puretec Hybrid E Series is carefully designed, using a natural sterilisation process that's eco-friendly and chemical-free, to kill up to 99.99% of harmful bacteria in untreated water supplies. The system includes pre-filtration to ensure that particulate matter does not shield micro-organisims from ultraviolet light.

The system is designed for rainwater supplies but may be used in other applications. For use with alternative water supplies, please contact your local Puretec stockist, or call our Puretec Customer Service Helpline on 1300 140 140 (Australia) or 0800 130 140 (New Zealand).

The Puretec Hybrid E cartridges and lamp need replacing regularly to maintain optimum performance. This is a simple procedure when following the instructions provided in your maintenance guide. For replacements, contact your nearest Puretec stockist, we recommend purchasing our all-inclusive Maintenance Kit, see your maintenance guide for order codes specific to your model.

Your new Hybrid E system incorporates a failure warning feature that warns you of a lamp failure by:

 1. An LED warning light
 2. An audible alarm

The alarm beeping and red light flashing every 3 seconds, will indicate that the lamp is due for a change, and a blue LED light will indicate that the system is still operating correctly.

Preparing Your System

Puretec systems are designed to run economically for many years, dependent on the initial installation and periodical maintenance.

Please read all instructions carefully, as failures caused by incorrect installation or operation are not covered by warranty.

On removing your Hybrid E system from its carton, you should check all the components are present and have not been damaged in transportation (especially the lamp). Depending on your model, you should have:

1. Hybrid E System (with double or triple filtration and with or without an Architecturally Mounted Cover)

2. Ultraviolet Lamp (in cardboard tube)

3. Electronic Controller (pre-installed)

4. A bag containing; A Housing Bowl Spanner, Installation Guide, Mounting Template, Homeowners Pack (Maintenance Guide, Welcome Card) Spring, Key, Tube Spanner, Anchor Fittings and Surge Protector

5. 2 x Lead-free Brass Male Nipples

HOUSING BOWL SPANNER

KEY

TUBE SPANNER

NIPPLES

SPRING

INSTALLATION GUIDE & MOUNTING TEMPLATE

HOMEOWNERS PACK

ANCHOR FITTINGS

ARCHITECTURALLY MOUNTED COVER (AMC VARIANTS ONLY)

HYBRID E SYSTEM

ELECTRONIC CONTROLLER (PRE-INSTALLED)

SURGE PROTECTOR

ULTRAVIOLET LAMP
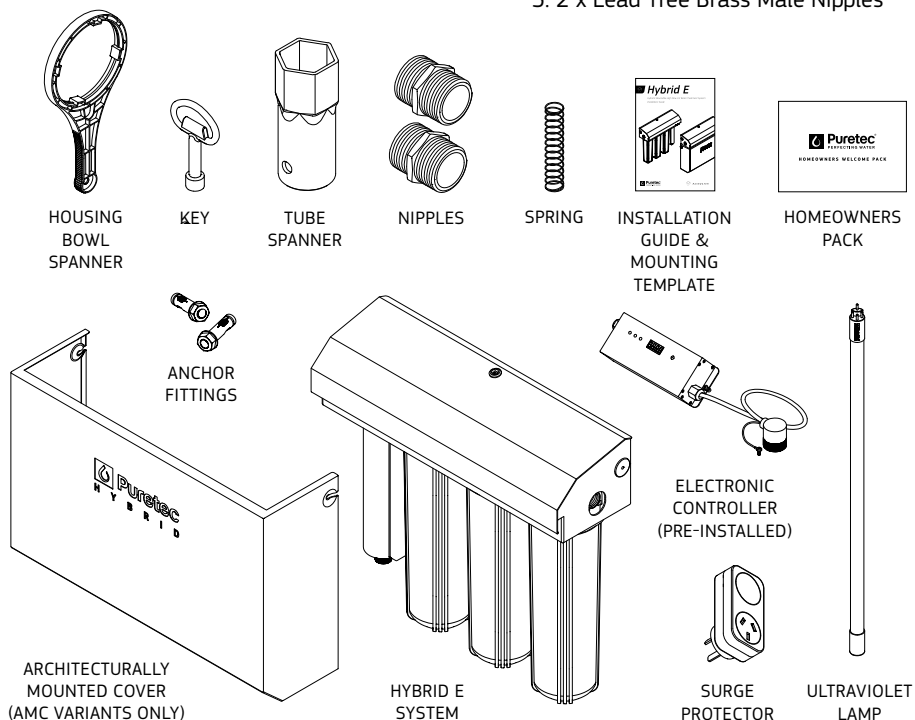
Remove all the packing materials prior to use.

As a responsible manufacturer we care about the environment. We urge you to follow the correct disposal procedure for your product and packaging materials. You must dispose of this product and its packaging according to local laws and regulations.

Positioning Your System

Choose a location with a structurally appropriate mounting position. Allow a chamber length space above the unit for removal of the lamp and the quartz sleeve during servicing, and 120 mm below the housings for replacing the cartridges and for maintenance.

An isolation valve may be installed prior to the Hybrid E systems, to isolate the unit when changing the cartridges, lamp and sleeve.

To protect your Hybrid E system, ensure the site is frost-free, and has adequate ventilation. Choose a location with suitable drainage, and where water spillage will not cause damage that may occur over time, in the case of leaking pipe joints or seals.

Power Surge Protection

An electrical power surge or spike can travel on the supply lines and cause serious damage to your electrical equipment. The electronic controller has a fuse (non-replaceable) to protect the circuit. The fuse is not a lightning arrester and may not protect the ultraviolet steriliser if lightning, or a very powerful surge hits the unit.

A suitable surge protection device has been provided with this product. Puretec recommends the use of a surge protector (the one supplied or otherwise) or warranty may be voided.

WARNING: The power surge protector provided, is not weatherproof & MUST be protected from water/moisture.

It would usually be sufficient for the surge protector to be installed under the eaves of a house and/or out of the weather, otherwise, it would need to be suitably protected. Ensuring the surge protector is suitably protected from water/moisture is the responsibility of the user. Alternatively, a hard-wired outdoor surge protector may be installed by a qualified electrician or an outdoor rated surge protector may also be used.

Reorder code for surge protectors: PC-SURGE

Do not use long extension leads, as they may cause substantial voltage drop and/or poor lamp performance. **We recommend the use of an RCD or earth leakage circuit breaker** on the power supply to your unit.

Installation Requirements

WARNING: FOR THE CORRECT OPERATION OF THIS APPLIANCE, IT IS ESSENTIAL TO OBSERVE THE MANUFACTURER'S INSTRUCTIONS.

All Hybrid E systems should be protected from harsh environments where overexposure to salt or aggressive chemicals can occur.

- Cold water line only.

- Power supply: AC 240V | 50Hz

- Supply pressure: 300 – 875* kPa.

  Where line pressure exceeds 500 kPa, an approved pressure-limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. (Ref. AS/NZS 3500.1:2021, Clause 3.3.4).

- Ambient temperature 0 – 52 °C (protect from freezing).

- Water Supply Temperature 2 – 38 °C

- For point of entry installations, an approved dual check back flow prevention device must be installed.

- Alternative fittings may be required if the system is connected to anything other than 25 mm threads.

- Liquid sealants may be used, however, please take care to ensure the correct sealant is used. Use the appropriate amount, without any overflow or spillage.

- Ensure the water supply flow rate does not exceed the rated maximum of the Hybrid E system.

- Ensure the electrical power supply to the Hybrid E system is sufficient, allowing for other appliances that may be connected to the circuit e.g. pump. Confirm the unit is surge-protected and protected against brown-outs. If in doubt, please consult a qualified electrician.

- Use union joints at pipe connections to enable easy removal and servicing.

- Use sufficient tape/sealant to ensure an airtight seal and do not over-tighten.

- To prevent strain on the unit, heavy inlet and outlet pipes should always be supported.

A deposit build-up on the quartz sleeve may occur over time if the water being treated contains unusually high levels of dissolved solids- particularly hard water, iron,

manganese or biological organisms. The maximum recommended parameters are as follows:

Hydrogen Sulfide:	less than 0.05 mg/L
Suspended Solids:	less than 10mg/L
Manganese:	less than 0.05 mg/L
Hardness:	less than 110mg/L
Iron:	less than 0.3 mg/L
pH Range:	5 to 9

Application Warning: Minimum water characteristics must be met before the installation of the Hybrid system to ensure proper operation and continuous protection.

If stated water quality parameters are exceeded; pre-filtration is required as water of this quality can compromise the effectiveness of the ultraviolet steriliser. The filters and the sleeve should be cleaned or replaced as required to keep them in good condition.

If bacteria has been present prior to the installation of this system, we recommend flushing the pipelines with Puretec TankSafe™.

Warning: The ultraviolet steriliser should only be connected to metal pipes and/or fittings for at least 1 metre after the outlet. Never connect plastic pipes or fittings directly to the ultraviolet steriliser.

The system should not be used for any other purpose without specific referral by Puretec.

The heating of water is a result of the emittance of ultraviolet rays, if this is deemed a problem we recommend installing a temperature management valve, installed inline immediately after the system, releasing water periodically. **Ordering code is RI-TMS4.**

Installation Note: A water filter system/tap, like any product, has a limited life and may eventually fail. Sometimes failure occurs prematurely due to unforeseen circumstances. To avoid possible property damage, this product should be regularly examined for leakage and/or deterioration and replaced when necessary. A drain pan, plumbed to an appropriate drain or outfitted with a leak detector, should be used in those applications where any leakage could cause property damage, and/or the water supply should be turned off if no one is home/present.

INSTALLATION SHOULD BE COMPLETED BY QUALIFIED TRADESPEOPLE. FAULTY OPERATION DUE TO UNQUALIFIED PERSONS WILL RESULT IN VOIDED WARRANTY COVERAGE.
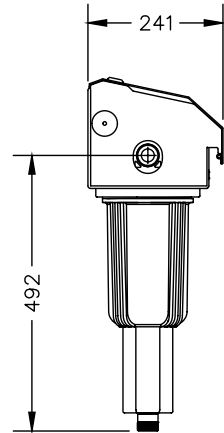
Installation Record

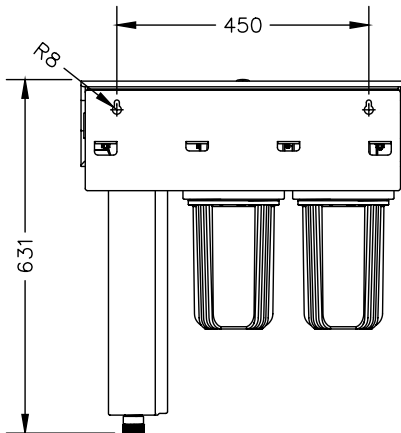| Product Information	
Distributor:	
Installer:	
Phone:	
Date Installed:	

Fig. 1 – E6 & E8 Dimensions
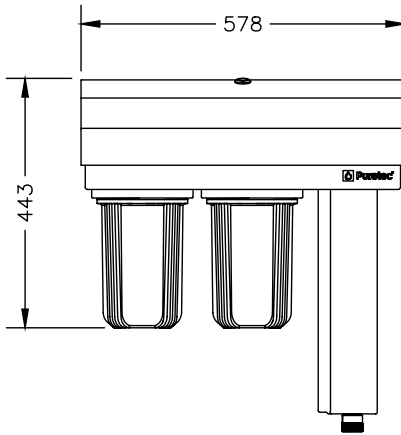
FRONT VIEW

LEFT SIDE VIEW

BACK VIEW

RIGHT SIDE VIEW

All dimensions are shown in millimetres.

Fig. 2 – E7 & E9 Dimensions

FRONT VIEW

LEFT SIDE VIEW

BACK VIEW

RIGHT SIDE VIEW

All dimensions are shown in millimetres.
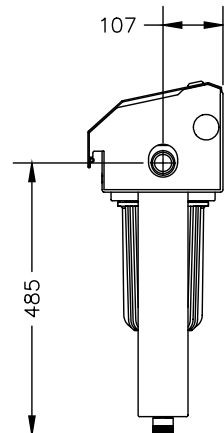
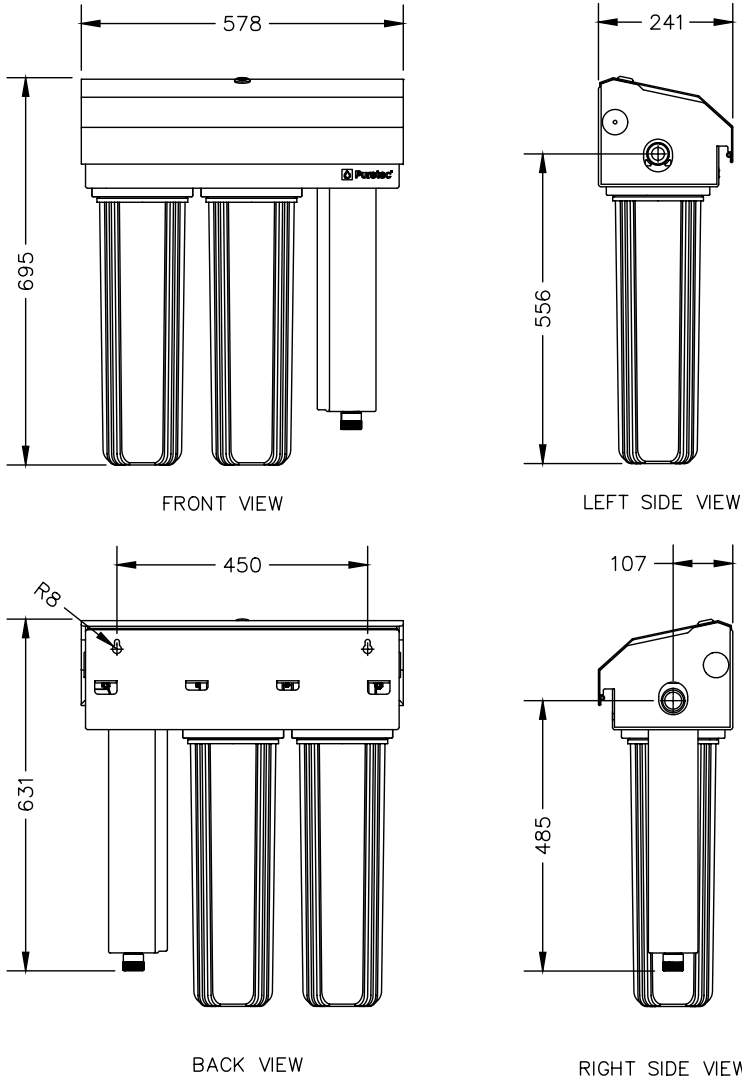## Fig. 3 – E7AMC & E9AMC Dimensions

FRONT VIEW

LEFT SIDE VIEW

BACK VIEW

RIGHT SIDE VIEW

All dimensions are shown in millimetres.

Fig. 4 – E13 Dimensions

All dimensions are shown in millimetres.

Fig. 5 – E13AMC Dimensions

FRONT VIEW

LEFT SIDE VIEW

BACK VIEW

RIGHT SIDE VIEW
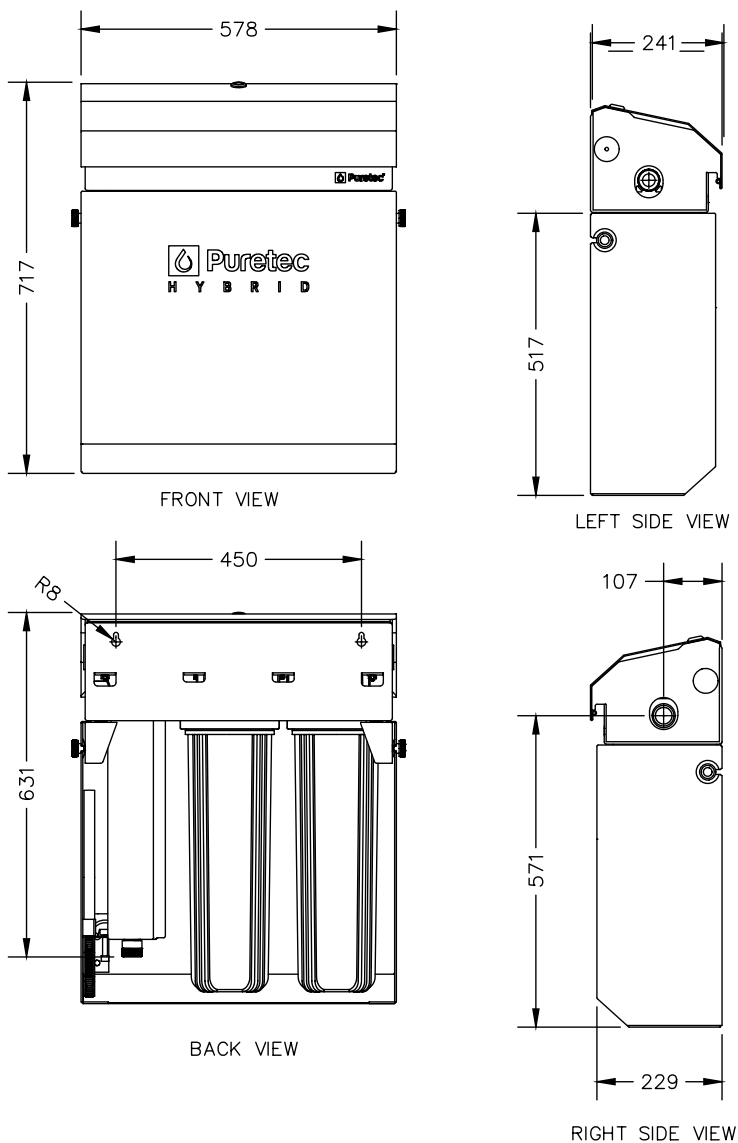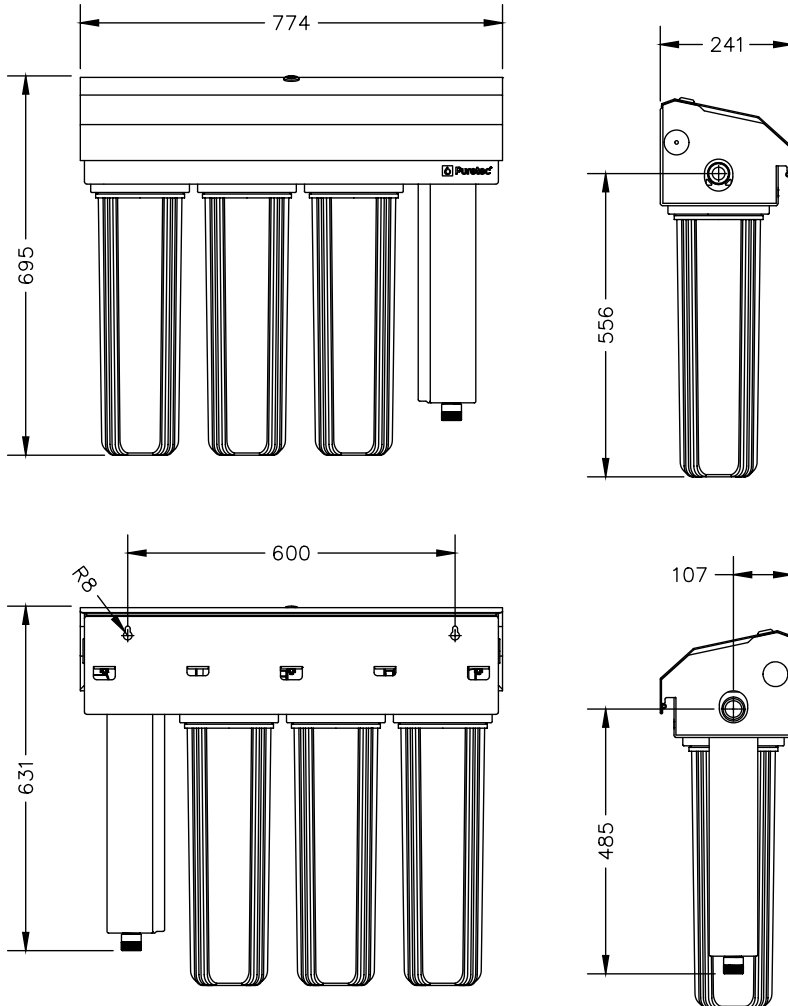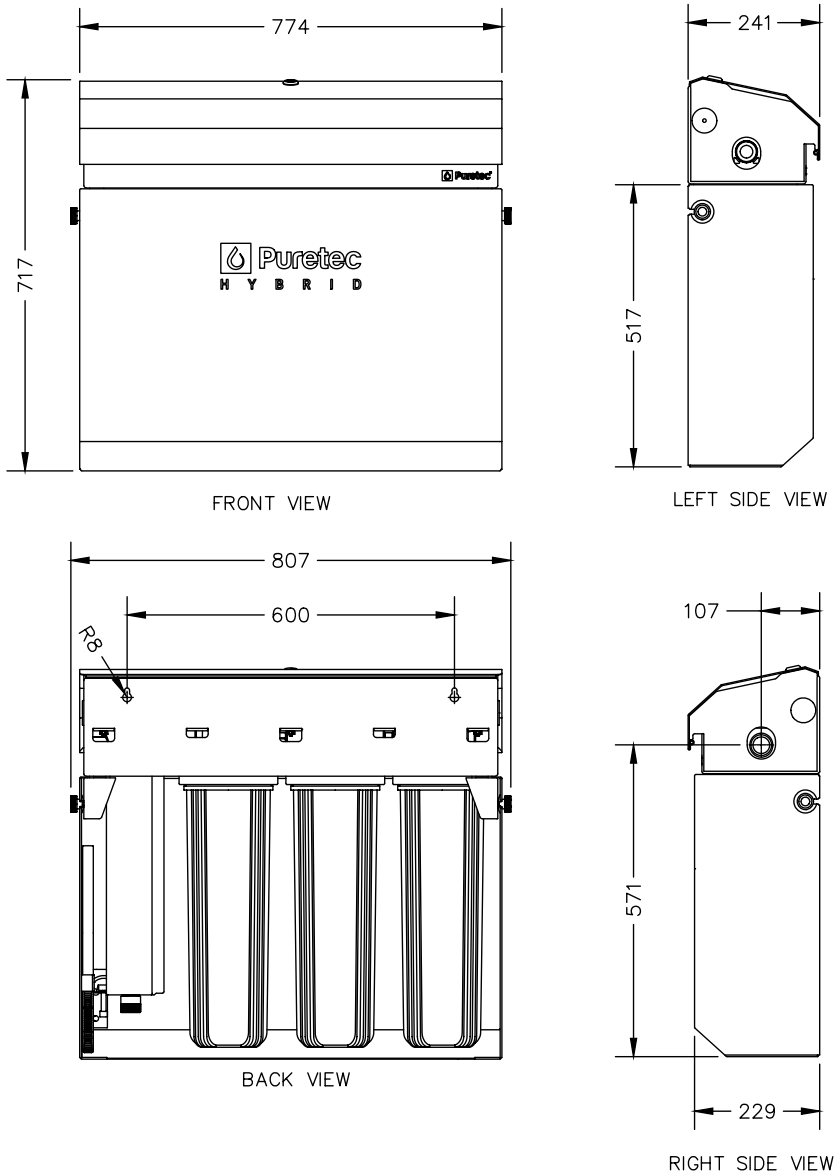
All dimensions are shown in millimetres.

Fig. 6 – System Parts Diagram, Exploded View

Reversible Filter Assembly

Wall Mount Structure

Architecturally Mounted Cover
(AMC Models Only)

Lid

Perimeter Screws

Rubber Grommet

Electronic Controller Bracket

Reversible Filter Assembly Plate

Nipple

Rubber Grommet

Housing Heads

O-Rings

Electronic Controller

Radfire ™ Ultraviolet Steriliser

Housing Spanner

Housing Bowls

Key

Filter Cartridges (Dual or triple depending on model)

Tube Spanner

Fig. 7 – Radfire™ Ultraviolet Steriliser Parts Diagram, Exploded View

Ultraviolet Steriliser Lamp Cap

Earthing Wire

Top Sealing Nut

O-Ring

Mounting Nut

UV Lamp

Quartz Sleeve

Rubber Gasket

Water Outlet

Radfire™ Ultraviolet Steriliser Chamber

Spring

O-Ring

Bottom Sealing Nut

E6 Model Information

Specifications

Max. Flow Rate :	75 Lpm
Flow Rate @16mJ/cm²:	130 Lpm
Flow Rate @30mJ/cm²:	70 Lpm
Flow Rate @40mJ/cm²:	54 Lpm
Dimensions:	578 mm (W) x 631 mm (H) x 241 mm (D)
Micron Rating:	5 micron^
Min/Max Temperature:	0 – 52°C (protect from freezing)
Water Supply Temperature:	2 – 38°C
Min/Max Pressure:	300 – 875* kPa
Connection:	1" BSP (Male) (25 mm)
Maintenance Kit Order Code:	**HR-EI6** (Includes all cartridges required)
1st Stage:	PL05MP1, 10" MaxiPlus™ Pleated Sediment
2nd Stage:	DP10MP1, 10" MaxiPlus™ Dual Purpose

Note: * Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. ^Micron rating is nominal.

700mm clearance

allow min. 120mm clearance from the ground

Left to right water flow shown.

Copyright © Puretec Pty Ltd 2025
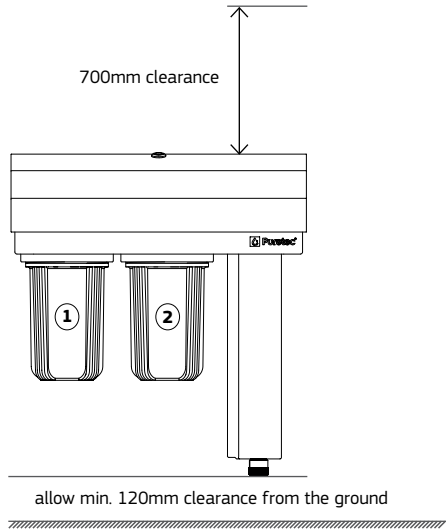
E7 / E7AMC Model Information

Specifications

Max. Flow Rate :	130 Lpm
Flow Rate @16mJ/cm²:	130 Lpm
Flow Rate @30mJ/cm²:	70 Lpm
Flow Rate @40mJ/cm²:	54 Lpm
E7 Dimensions:	578 mm (W) x 695 mm (H) x 241 mm (D)
E7AMC Dimensions:	578 mm (W) x 717 mm (H) x 241 mm (D)
Micron Rating:	5 micron^
Min/Max Temperature:	0 – 52°C (protect from freezing)
Water Supply Temperature:	2 – 38°C
Min/Max Pressure:	300 – 875* kPa
Connection:	1" BSP (Male) (25 mm)
Maintenance Kit Order Code:	**HR-EI7** (Includes all cartridges required)
1st Stage:	PL05MP2, 20" MaxiPlus™ Pleated Sediment
2nd Stage:	DP10MP2, 20" MaxiPlus™ Dual Purpose

Note: * Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. ^Micron rating is nominal.
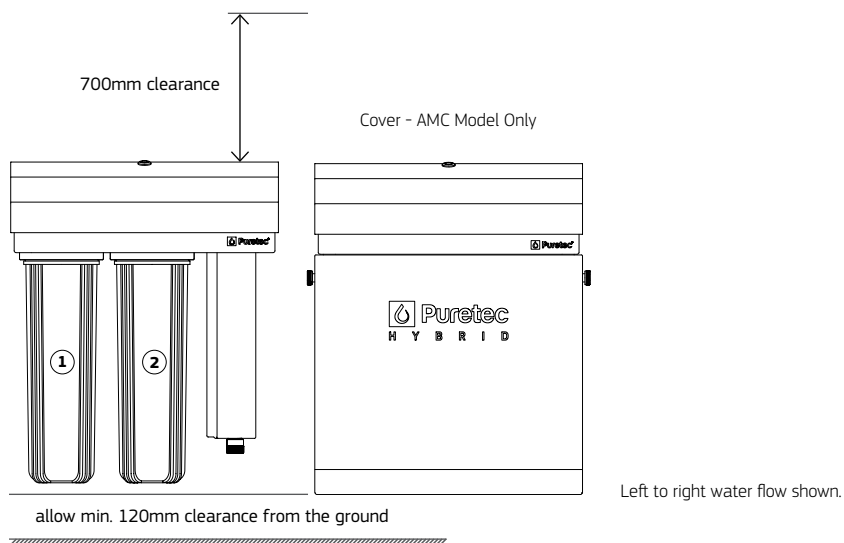
700mm clearance

Cover – AMC Model Only

① ②

Puretec
HYBRID

allow min. 120mm clearance from the ground

Left to right water flow shown.

E8 Model Information

Specifications

Max. Flow Rate :	75 Lpm
Flow Rate @16mJ/cm²:	130 Lpm
Flow Rate @30mJ/cm²:	70 Lpm
Flow Rate @40mJ/cm²:	54 Lpm
Dimensions:	578 mm (W) x 631 mm (H) x 241 mm (D)
Micron Rating:	1 micron^
Min/Max Temperature:	0 – 52°C (protect from freezing)
Water Supply Temperature:	2 – 38°C
Min/Max Pressure:	300 – 875* kPa
Connection:	1" BSP (Male) (25 mm)
Maintenance Kit Order Code:	**HR-EI8** (Includes all cartridges required)
1st Stage:	PL20MP1, 10" MaxiPlus™ Pleated Sediment
2nd Stage:	PX01MP1, 10" MaxiPlus™ Polyspun Sediment

Note: *Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. ^Micron rating is nominal.
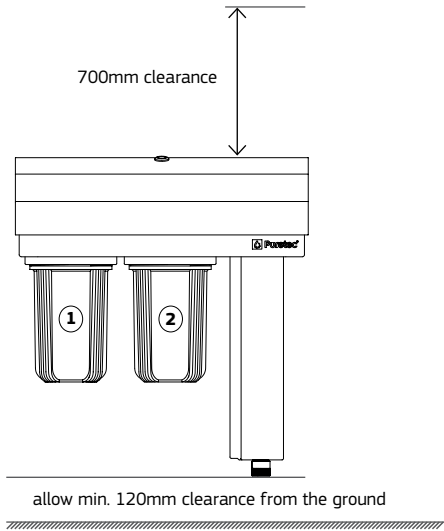

700mm clearance

allow min. 120mm clearance from the ground

Left to right water flow shown.

E9 / E9AMC Model Information

Specifications

Max. Flow Rate :	130 Lpm
Flow Rate @16mJ/cm²:	130 Lpm
Flow Rate @30mJ/cm²:	70 Lpm
Flow Rate @40mJ/cm²:	54 Lpm
E9 Dimensions:	578 mm (W) x 695 mm (H) x 241 mm (D)
E9AMC Dimensions:	578 mm (W) x 717 mm (H) x 241 mm (D)
Micron Rating:	1 micron^
Min/Max Temperature:	0 – 52°C (protect from freezing)
Water Supply Temperature:	2 – 38°C
Min/Max Pressure:	300 – 875* kPa
Connection:	1" BSP (Male) (25 mm)
Maintenance Kit Order Code:	**HR-EI9** (Includes all cartridges required)
1st Stage:	PL20MP2, 20" MaxiPlus™ Pleated Sediment
2nd Stage:	PX01MP2, 20" MaxiPlus™ Polyspun Sediment

Note: * Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. ^Micron rating is nominal.
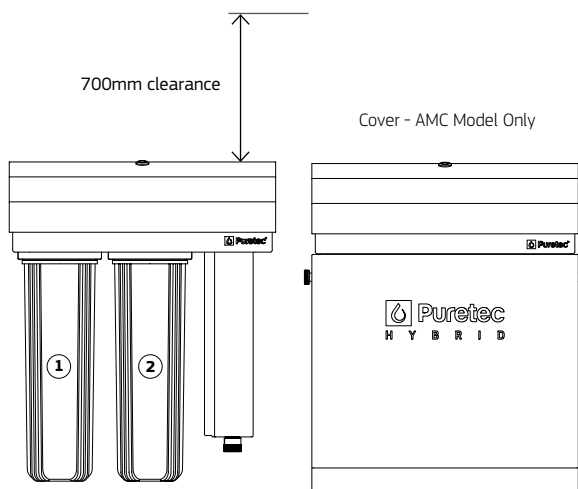

700mm clearance

Cover – AMC Model Only

allow min. 120mm clearance from the ground

Left to right water flow shown.

E13 / E13AMC Model Information

Specifications

Max. Flow Rate :	120 Lpm
Flow Rate @16mJ/cm²:	130 Lpm
Flow Rate @30mJ/cm²:	70 Lpm
Flow Rate @40mJ/cm²:	54 Lpm
E13 Dimensions:	774 mm (W) x 695 mm (H) x 241 mm (D)
E13AMC Dimensions:	774 mm (W) x 717 mm (H) x 241 mm (D)
Micron Rating:	1 micron^
Min/Max Temperature:	0 – 52°C (protect from freezing)
Water Supply Temperature:	2 – 38°C
Min/Max Pressure:	300 – 875* kPa
Connection:	1" BSP (Male) (25 mm)
Maintenance Kit Order Code:	**HR-EI13** (Includes all cartridges required)
1st Stage:	PL05MP2, 20" MaxiPlus™ Pleated Sediment
2nd Stage:	CB05MP2, 20" MaxiPlus™ Carbon Block Taste & Odour
3rd Stage:	PX01MP2, 20" MaxiPlus™ Polyspun Sediment

Note: *Where line pressure exceeds 500 kPa, an approved pressure limiting device must be installed to comply with Australian & New Zealand Plumbing Standards. ^Micron rating is nominal.
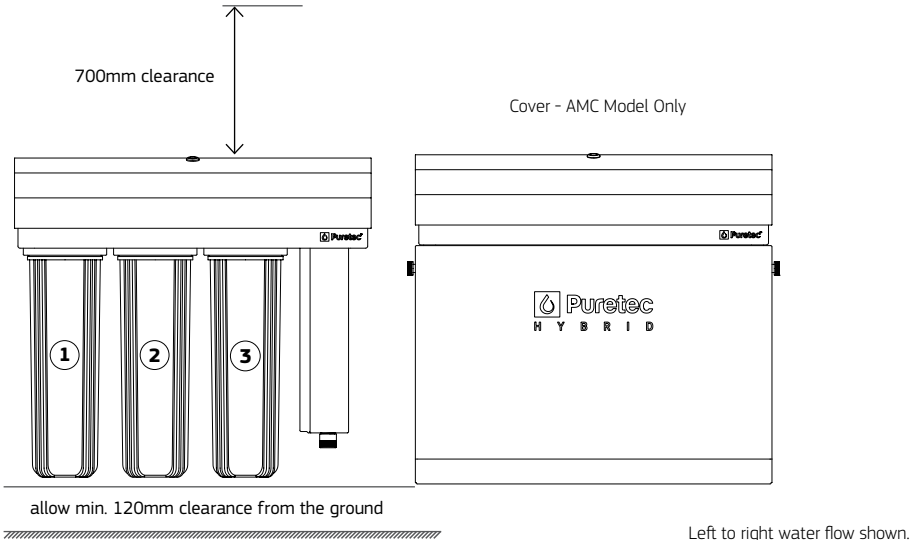

700mm clearance

Cover – AMC Model Only

allow min. 120mm clearance from the ground

Left to right water flow shown.

Reversed Installation Procedure (Right to Left Water Flow)

IF THE SYSTEM IS BEING INSTALLED REVERSED, FOLLOW THESE INSTRUCTIONS **BEFORE** MOUNTING IT TO A WALL AND PRIOR TO PLUMBING THE SYSTEM.

If the system is intended to have left-to-right water flow, proceed to the Initial Installation Procedure section.

The Puretec Hybrid E Series has 1" [25 mm] plumbing connections.

1. If the unit is an AMC model, lay the unit on its back on a clean secure surface, ensuring the bowls are well-supported and protected. Take off the AMC (Architecturally Mounted Cover) by loosening the two black handles on the sides and sliding the cover forward.

2. On a clean, secure surface, stand the unit upright on the housing bowls. Unlock and open the lid using the key provided.

3. Pop out the rubber grommets on both sides of the wall mount bracket, and feed the electronic controller cable into the bracket.

4. Unplug the ultraviolet steriliser lamp cap from the top sealing nut and unscrew the retaining screw, that is securing the yellow earthing wire to the stainless steel chamber. Set the retaining screw to the side.

5. Unscrew the two screws on the electronic controller, with the electronic controller and lamp cap attached, and lift the bracket upwards and place it to the side.
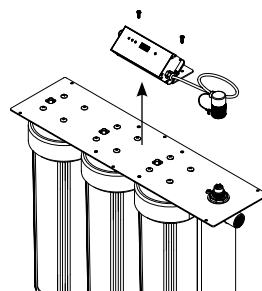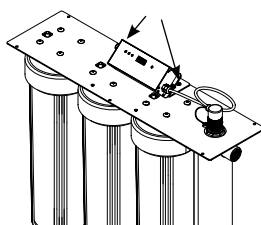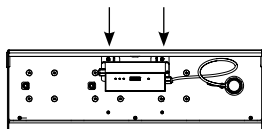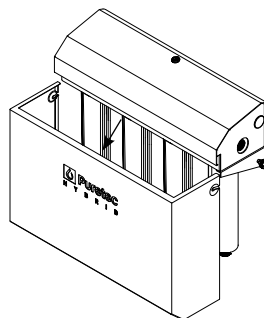
6. Unscrew the small black screws around the perimeter of the reversible filter assembly plate. If the system is a dual bowl unit, there will be 4 screws, triple bowl units will have 6.

   CAUTION: The wall mount structure will slide down, once the screws have been loosened. Ensure the wall mount structure is properly secured, and slowly place it on the ground in a safe spot.
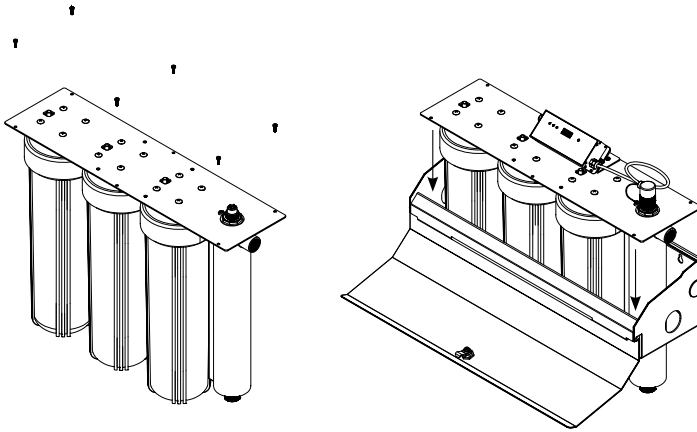
7. Locate a suitable position for the Hybrid E system, remembering to allow 120 mm under models with 20" housing, and 700 mm clearance above all models for cartridge and lamp changes. A power outlet near the unit is required.

8. The Hybrid E units have 2 mounting keyholes at the rear of the wall mount bracket. Use the template provided, to mark the desired position on the wall where the fixings are required to go.

9. Drill the holes and install the anchors.

10. Position the wall mount bracket on the wall and tighten the fixings to hold it securely to the wall.

11. Carefully place the reversible filter assembly into the wall mount bracket, in the right to left orientation. There are small tabs in the wall mount structure that the reversible filter assembly plate sits on. The inlet water supply should be on side closest to the stage 1 housing bowl, and the outlet should exit through the ultraviolet steriliser.
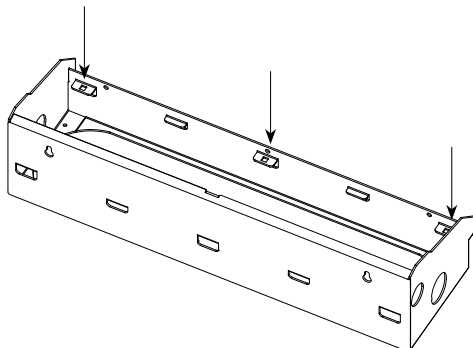
12. Fasten the perimeter screws on the reversible filter assembly plate to secure it to the wall mount bracket.

13. Reinstall the electronic controller bracket, ensuring the screen of the electronic controller is facing outwards.

14. Ground the ultraviolet steriliser lamp cap by placing the retaining screw through the loop of the yellow earthing wire and screw firmly into the hole located at the top of the ultraviolet steriliser chamber.

15. Reinstall the grommets, the slitted grommet should be on the side closest to the power supply. Thread the power cable through.

16. Continue to Step 6 in the Initial Installation Procedure.

Initial Installation Procedure (Standard Left to Right Water Flow)

The Puretec Hybrid E Series has 1" [25 mm] plumbing connections and is built in the left to right water flow orientation as standard (For right to left installation, see Reversed Initial Installation steps first)
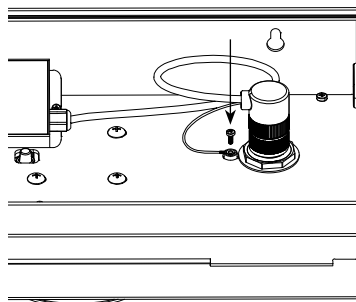
1. Locate a suitable position for the Hybrid E system, remembering to allow 120 mm under models with 20" housing, and 700 mm clearance above all models for cartridge and lamp changes. A power outlet near the unit is required.

2. Unlock and open the lid using the key provided.

3. Hybrid E units have 2 mounting keyholes at the rear of the wall mount bracket. Use the template provided to mark the desired position on the wall where the fixings are required to go.

4. Drill the holes, and install the anchors.

5. Position the wall mount bracket on the wall and tighten the fixings to hold the bracket securely to the wall.
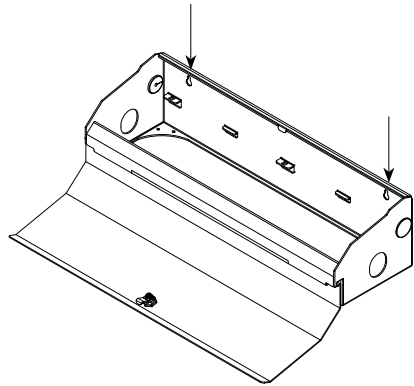
6. Turn the water off at the mains and purge the lines.

7. Install the supplied 25 mm brass nipples into the inlet and outlet with the tube spanner supplied.

8. Plumb the inlet and outlet pipework to the Hybrid unit.

    Important Note: Take care if using liquid sealants, ensure the correct sealant is used and all manufacturer's instructions are followed. Never connect PVC pipe directly to the unit. The outlet pipework within 1 metre of the unit should be metal or polyethylene.

9. Remove the ultraviolet steriliser lamp cap from the top sealing nut. If mounting nut is inadvertently loosened during this process, retighten it.

10. Check to ensure the quartz sleeve is intact within the ultraviolet sterilser. Do this by looking into the ultraviolet steriliser chamber to see if the glass is intact.

11. Drop the spring into the hole in the ultraviolet sterilser chamber.

12. Unpackage the provided ultraviolet lamp and slowly insert it into the chamber through the hole in the top sealing nut.
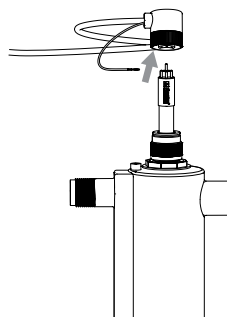
    Important Note: Never touch the quartz (glass) and lamp surface as marks or fingerprints may interfere with ultraviolet transmission. If the lamp is soiled, please clean lamp with Puretec's SC1000 Sleeve Cleaner.

    Connect the lamp cap pins on the lamp. DO NOT let go of the lamp until the lamp is connected to the cap.

13. Secure the ultraviolet sterilser lamp cap back on the top sealing nut. Ensure the retaining screw connecting the yellow earthing wire to the chamber has not loosened in transportation, tighten if necessary. Plug in the power cable, ensuring an appropriate surge protector (provided) is used. DO NOT turn on the power yet.

14. Check each housing bowl and ensure they have not become loose in transport. Tighten the housing bowls until firm. HAND TIGHTEN ONLY. DO NOT OVERTIGHTEN.

15. Turn the water supply on, and allow the water to flow through the system, opening a tap downstream to flush the unit for 3 – 5 minutes. Then check the system thoroughly for leaks. Rectify if any are found.

16. Turn the power on and ensure that the lamp is operating by making sure the blue LED is illuminated.

    Note: For initial use, wait an additional 2 – 3 minutes to release any air and impurities from the system. The water WILL NOT be protected by ultraviolet sterilisation until this is complete.

17. Close and lock the lid. On the AMC models, remount the AMC (Architecturally Mounted Cover) and tighten the handles. Note: Your system come with a key to secure the lid. Please store it safely, as lost or misplaced keys are not covered by warranty.

Operation

At any point after the ultraviolet lamp has been turned off allow two minutes for the lamp to reach full intensity before starting the water flow.

On a new installation, where no other form of sterilisation has been in use, we recommend flushing the pipework with a suitable sanitiser such as TankSafe™ (for dosage refer to TankSafe™ product instructions). This solution should be left in the pipework for at least an hour and preferably overnight.

The sanitising solution can be added into the water tank or if necessary added as a shock dose into the bowl of the filter housing of the Hybrid and slowly flushed through the piping. If added as a shock dose the system and pipework should be rinsed thoroughly by opening a downstream tap.

Radfire™ Ultraviolet Steriliser Operation

Before performing any work on the ultraviolet steriliser, always disconnect the power supply.

Warning: Do not look directly into ultraviolet rays emitted from the lamp as they will cause serious burns to unprotected eyes.

The treated water will seem warm for a short period at first flow. This is because the lamp emits heat when producing ultraviolet rays to kill bacteria. When turning on a tap, let the water run for a short time to purge any warm water.

Electronic Controller Operation

Countdown Timer

This timer shows the number of days remaining out of the total 365 days before the lamp reaches the end of life and should be replaced with a genuine Puretec **RL7** lamp. If the electronic controller is in temporary silence mode, the timer will show the number of days remaining in the temporary silence period of 7 days.

Total Running Time

Shows the number of days the lamp has been running since the last reset.

This will continue to increase from 365 when the electronic controller is in temporary silence mode.

Length of time button is pressed	Function	Result
< 5 seconds	In normal operation, switch display between countdown timer and total running time.	The total running time will display for 10 seconds then switch back to the countdown timer
< 5 seconds	During EC5 switch the display screen between "EC5", countdown timer and total running time. **Note:** See Electronic Controller Troubleshooting and Error Codes table for display code details	The screen can be switched between the error code, countdown timer and total running time.
5 - 15 seconds	Temporary silence of alarm (attempt 1-4). **Warning:** Silencing the alarm for a fifth time will result in the light turning off. See "EC4" for more details.	The unit will beep and show "DLAY" on display for 3 seconds, before silencing the alarm for 7 days. The fault light will remain on for the duration of the 7 days. **Note:** The countdown timer will begin to count downward from 7, and the total running time will continue counting up from 365. **Note:** The alarm will come back on and the fault light will start flashing again after the 7 day period.
15+ seconds	Total electronic controller reset. Should be completed when lamp is replaced	The unit will beep and the countdown timer will reset to 365 and the total running time will reset to 0. Additionally, the silence counter will return to 0.

Radfire™ Ultraviolet Steriliser System Specifications

Input Current:	0.5A (120V) / 0.25A (240V)
Power Output:	46W Max
U-OUT:	60V
Power Factor:	>95%
Ambient Temperature:	0 - 40°C
Ultraviolet Lamp Rated Life:	365 days

Caution: Ensure the electronic controller casing is properly earthed to avoid possible high voltage shock hazard.

Symptoms	Possible Cause	Possible Solution
Electronic controller or breaker repeatedly trips.	1. Connection between lamp and lamp plug is wet. 2. Short-circuit in the electrical assembly.	1. Clean and dry lamp pins and lamp plug, check unit for leaks or condensation. 2. Replace electronic controller.
Leak at inlet or outlet.	1. Threaded pipe fittings are leaking. 2. Cracked heads.	1. Clean threads, reseal with Teflon tape and retighten. 2. Replace heads.
Leak detected from ultraviolet sterilisation chamber area.	1. Condensation of moist air on cold chamber (slow accumulation). 2. O-ring damaged, deteriorated or incorrectly installed. 3. Lamp/sleeve assembly not properly installed (too tight or not tight enough). 4. Quartz sleeve is damaged.	1. Control humidity or relocate unit. 2. Inspect and replace if deteriorated. Check O-rings are in place. 3. Tighten assembly hand-tight. 4. Visually inspect the quartz sleeve and replace if damaged.
System is operating but water tests reveal bacterial contamination.	1. Equipment downstream of the ultraviolet sterilisation system is acting as a breeding ground for pathogens. 2. Pathogens are residing in the distribution lines post-ultraviolet sterilisation. 3. Lamp reached the maximum lamp life.	1. Ensure ultraviolet sterilisation system is the last piece of treatment equipment. Ensure all distribution lines have been disinfected. 2. Remove any pipe dead-ends and flush with chlorine. 3. Replace the lamp on or before the lamp counter reaches 0.
Lamp timer does not read anything.	1. Unit is unplugged. 2. No power at AC power outlet. 3. Power cord is damaged. 4. Power surge caused damage to electrical assembly.	1. Plug unit into AC power outlet. 2. Replace fuse or reset breaker. 3. Replace electronic controller. 4. Replace electronic controller.
Leak detected at filters.	1. O-ring damaged, deteriorated or incorrectly installed. 2. O-rings dry. 3. Filter cartridge not centered.	1. Remove the sump, wipe the O-ring and threads clean. Ensure the O-ring is fitted properly, then reinstall. 2. Lubricate the O-rings with suitable sealant. 3. Remove sump, check for cartridge damage, and re-assemble ensuring cartridge is centered.

In the event of any other breakdown, please call Puretec on 1300 140 140 (AU) 0800 130 140 (NZ).

Electronic Controller Troubleshooting and Error Codes

Display	Audible Alarm	Red LED	Blue LED	Electronic Controller / Lamp Status	Possible Cause	Possible Solution
EC1	2 Beeps every 4 seconds. **Note:** Cannot be silenced.	2 flashes every 4 seconds.	Off	Off	Missing lamp or no lamp detected.	Check lamp is connected.
EC2	1 beep every 3 seconds.	1 flash every 3 seconds.	On	On	Lamp is at end of life, countdown timer has reached 0.	Replace the lamp.
EC3	2 beeps every 4 seconds. **Note:** Cannot be silenced.	2 flashes every 4 seconds.	Off	Off	Fault detected with lamp or electronic controller.	Replace the lamp and/or replace the electronic controller.
EC4	2 Beeps every 4 seconds. **Note:** Cannot be silenced any more.	2 flashes every 4 seconds.	Off	Off	Maximum silences reached (cannot be silenced more than 4 x 7 days).	Replace the lamp and reset the electronic controller.
EC5	Off	On	On	On	Successful temporary silence. Alarm will be silenced for the next 7 days. **Note:** This cannot be done more than 4 times.	**Caution:** Unit on temporary silence. Replace the lamp and reset electronic controller.

Warning: When the end of life (EC2) is reached, it can be temporarily silenced for 7 days, up to 4 times only. After that, it will not silence again.

Performance Data Tables

HYBRID-E6					
Component	**3rd Party Verified Claims**	**Internally Tested Claims**	**Avg. Influent Water Concentration**	**Avg. Effluent Water Concentration**	**Conformance Rating**
Ultraviolet Equipment	Bacteria reduction 99.99%		$4 \times 10_6$ cfu	4 cfu @ 54Lpm 20 cfu @ 70Lpm	Cat. II (a), (b), (c)
PL05MP1		1) Turbidity and particulate removal – reduces cloudiness and sediment ≥5um (nom.)	1,000 /mL	150-200 /mL	Cat. VI (b)
DP10MP1		1)Taste and odour reduction – reduces taste and odour 2)Turbidity and particulate removal – reduces cloudiness and sediment ≥10um (nom.)	1) 2.0 mg/L ± 10% 2) 10,000 /mL	1) 0.15 mg/L ± 10% 2) 500-1,000 /mL	Cat. VI (b)

HYBRID-E7 & HYBRID-E7AMC					
Component	**3rd Party Verified Claims**	**Internally Tested Claims**	**Avg. Influent Water Concentration**	**Avg. Effluent Water Concentration**	**Conformance Rating**
Ultraviolet Equipment	Bacteria reduction 99.99%		$4 \times 10_6$ cfu	4 cfu @ 54Lpm 20 cfu @ 70Lpm	Cat. II (a), (b), (c)
PL05MP2		1) Turbidity and particulate removal – reduces cloudiness and sediment ≥5um (nom.)	1,000 /mL	150-200 /mL	Cat. VI (b)
DP10MP2		1)Taste and odour reduction – reduces taste and odour 2)Turbidity and particulate removal – reduces cloudiness and sediment ≥10um (nom.)	1) 2.0 mg/L ± 10% 2) 10,000 /mL	1) 0.15 mg/L ± 10% 2) 1,500 /mL	Cat. VI (b)

Puretec PERFECTING WATER

HYBRID-E8					
Component	3rd Party Verified Claims	Internally Tested Claims	Avg. Influent Water Concentration	Avg. Effluent Water Concentration	Conformance Rating
Ultraviolet Equipment	Bacteria reduction 99.99%		$4\times10_6$ cfu	4 cfu @ 54Lpm 20 cfu @ 70Lpm	Cat. II (a), (b), (c)
PL20MP1		1) Turbidity and particulate removal – reduces cloudiness and sediment ≥20um (nom.)	10,000 /mL	1,500 /mL	Cat. VI (b)
PX01MP1		1)Turbidity and particulate removal – reduces cloudiness and sediment ≥1um (nom.)	10,000 /mL	1,500 /mL	Cat. VI (b)

HYBRID-E9 & HYBRID-E9AMC					
Component	3rd Party Verified Claims	Internally Tested Claims	Avg. Influent Water Concentration	Avg. Effluent Water Concentration	Conformance Rating
Ultraviolet Equipment	Bacteria reduction 99.99%		$4\times10_6$ cfu	4 cfu @ 54Lpm 20 cfu @ 70Lpm	Cat. II (a), (b), (c)
PL20MP2		1) Turbidity and particulate removal – reduces cloudiness and sediment ≥20um (nom.)	10,000 /mL	1,500 /mL	Cat. VI (b)
PX01MP2		1)Turbidity and particulate removal – reduces cloudiness and sediment ≥1um (nom.)	10,000 /mL	1,500 /mL	Cat. VI (b)

HYBRID-E13 & HYBRID-E13AMC					
Component	**3rd Party Verified Claims**	**Internally Tested Claims**	**Avg. Influent Water Concentration**	**Avg. Effluent Water Concentration**	**Conformance Rating**
Ultraviolet Equipment	Bacteria reduction 99.99%		$4 \times 10_6$ cfu	4 cfu @ 54Lpm 20 cfu @ 70Lpm	Cat. II (a), (b), (c)
PL05MP2		1) Turbidity and particulate removal - reduces cloudiness and sediment ≥5um (nom.)	1,000 /mL	150 - 200 /mL	Cat. VI (b)
CB05MP2	1) Taste and odour reduction 2) Turbidity and particulate removal - reduces cloudiness and sediment ≥5um (nom.)		1) 2.0 mg/L ± 10% 2) 1,000 /mL	1) 0.1 mg/L ± 10% 2) 100 - 150 /mL	Cat. III Cat. V
PX01MP2		1)Turbidity and particulate removal - reduces cloudiness and sediment ≥1um (nom.)	10,000 /mL	1,500 /mL	Cat. VI (b)

Warranty

Any claim under this warranty must be made within 3 years, with an additional 2 year warranty for AMC Models from the date of purchase of the product. This product is warranted to be free of defect of material and workmanship for 3 and 5 years respectively from date of purchase.

3 year warranty is 1 year parts and labour plus 2 years parts only. Excludes consumables.

AMC Models 5 year warranty is 1 year parts and labour, plus 4 years parts only, the electronic controller is 3 years only. Excludes consumables.

Puretec is renowned for its quality and after-sales support so if you have any issues please call 1300 140 140 (AU) or 0800 130 140 (NZ). To make a warranty claim, contact us directly or the place of original purchase. All costs relating to a warranty claim must be approved by Puretec prior to any work being carried out.

Puretec will pay your reasonable, direct expenses of claiming under this warranty. You may submit details and proof of your expense claim to place of purchase for consideration.

The warranty only applies if the product was used and/or installed in accordance with the user guide and/or installation instructions. This warranty is given in lieu of all other express or implied warranties and manufacturer shall in no circumstance be held liable for damages consequential or otherwise or delays caused or faulty manufacturing except as excluded by law.

Applicable to all above, is that the warranties need to be approved by Puretec to ensure product was not incorrectly used, installed or claimed. False and incorrect claims will be pursued at Puretec's discretion, including chargeable inspection and labour costs incurred.

All installation and service work should be completed by qualified tradespeople. Faulty operation due to unqualified persons will result in voided warranty coverage.

Warranty/Australia

This warranty is given by Puretec Pty Ltd, ABN 44 164 806 688, 37–43 Brodie Road, Lonsdale SA 5160, telephone no. 1300 140 140 and email at sales@puretec.com.au.

This warranty is provided in addition to other rights and remedies you have under law: Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Warranty/New Zealand

This warranty is given by Puretec NZ LP, Reg. No 50081773, 178A Savill Drive, Favona, 2024, New Zealand, telephone no. 0800 130 140 and email at sales@puretec.co.nz.

This warranty is provided in addition to other rights and remedies you have under law: Our goods come with guarantees which cannot be excluded under the Consumer Guarantees Act. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
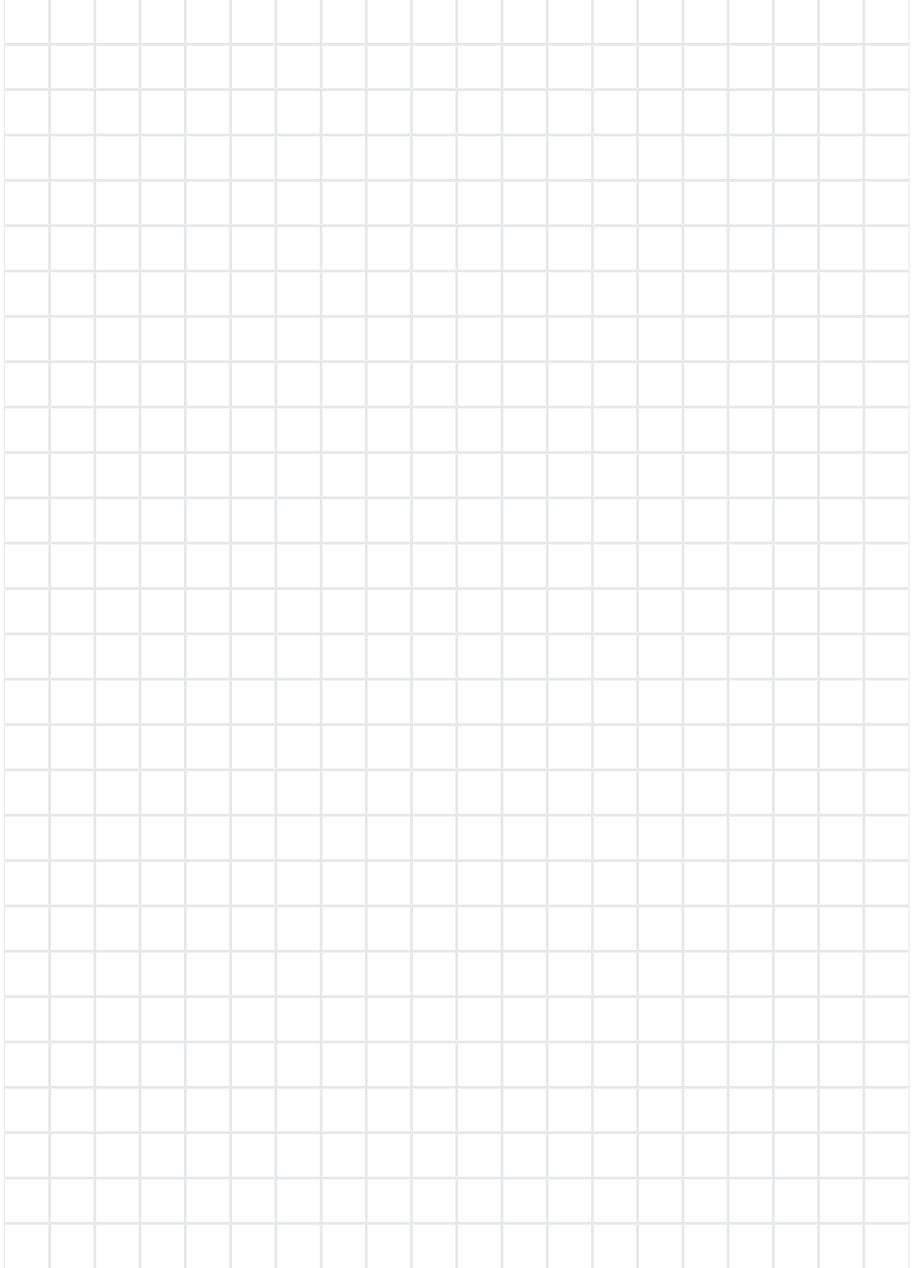
Australia
P   1300 140 140
E   sales@puretecgroup.com
W   puretec.com.au

New Zealand
P   0800 130 140
E   sales@puretecgroup.com
W   puretec.co.nz